involucri bracteis lineari-subulatis 2–4 mm. longis basi dilatatis vix gibbosis; floribus 3–10; pedicellis filiformibus adscendentibus vel arcuatis deinde 1.5–3 cm. longis; calycibus chartaceis plus minusve farinosis campanulatis 3–4 mm. longis 2–3.5 mm. diametro, lobis lanceolato-deltoideis 2–2.4 mm. longis minute ciliolatis; corollae tubo gracili 5–6 mm. longo limbo ca. 7 mm. diametro purpureo (?), lobis emarginatis; capsulis cylindricis 5 mm. longis valde exsertis; seminibus angulatis 0.6–0.8 mm. longis fulvescentibus rugulosis.—Arizona: limestone cliffs, North Rim, Grand Canyon, Coconino Co., August 19, 1928, *Francis Welles Hunnewell*, no. 10,883 (type in herb. F. W. Hunnewell, duplicate in Gray Herb.).

Primula Hunnewellii, as already stated, is nearest related to the rare *P. specuicola* Rydb., also of the Colorado Valley. From the latter it differs most strikingly in its very small calyx, only 3–4 mm. long, and its definitely exserted capsule; *P. specuicola* having the more herbaceous calyx 6–9 mm. long (fig. 3), with more attenuate lobes and greatly exceeding the capsule. In *P. specuicola*, likewise, the involucre is better developed, up to 1 cm. long. Whether there are any essential differences in the corolla can not yet be stated. Seeds from the type collection have been shared between Mr. Hunnewell, the Harvard Botanic Garden and the Royal Botanic Garden at Edinburgh (where is found the world's greatest collection of living Primulas). Should any of these germinate it will be possible later to report upon the fresh flowers. Plate 282 from a photograph made by Professor J. Franklin Collins and presented to Rhodora by Mr. Hunnewell, shows a single plant (fig. 1) of *P. Hunnewellii*, × 1, and beside it (fig. 2) a fruiting calyx, × 3; with a fruiting calyx of *P. specuicola* Rydb. × 3 (fig. 3) for comparison, from the type locality, Bluff City, southeastern Utah, *Eastwood*, no. 68.

Glottidium vesicarium in Oklahoma.—Specimens of *Glottidium vesicarium* (Jacq.) Harper were brought recently to the botany department by Dr. A. C. Shead. These plants were collected by Dr. Shead near Mannsville, Johnston County, October 8, 1933, where, according to the collector, they occur very locally, and chiefly near the highway. Johnston County lies just east of the south-central part of the state. To the writer's knowledge, this location constitutes the most northwesterly one known for the species, the previously known range being considered as from the Carolinas to Florida and west to Texas.

Being annuals, these leguminous plants elicited the usual surprise

because of their woody stems and unusual height—the specimens exceeding three meters.

Whether the plants are native, and possess an intermittent range to the Gulf, or have been introduced, is still a conjectural matter.—

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NOTES ON THE FLORA OF TENNESSEE: THE GENUS TRILLIUM

W. A. Anderson

The genus *Trillium*, including as it does some of the most attractive spring flowers, has always had considerable attention from botanists. More than a hundred years ago the greater number of eastern North American species had been introduced into Europe, where they were cherished as horticultural rarities. Illustrations, not only of the various species, but also of color-forms, appeared in the botanical and horticultural publications of the late 18th and early 19th centuries. As for the present day interest in *Trillium*, there have been within the past forty years four revisions of the genus or of sections of it;[1] two revisions of the Trilliums of particular regions;[2] a series of studies of the California Trilliums, involving the life-history of the plants, their frequent sterility, and production of monstrosities;[3] and a vast number of short notices, mostly concerned with teratological forms. In spite of all this publication, several points seem to have been overlooked concerning the taxonomy and nomenclature of this interesting genus, and there are certain problems which as yet await solution.

Though the genus *Trillium* is a small one, it is unusually complex. Many species exhibit a high degree of variability in size, in color, and in form. All the species with atropurpureous petals have light-colored allies, which may be recognized as forms or varieties, or which in some

[1] Small, J. K., *The Sessile-flowered Trillia of the Southern States*, Bull. Torr. Bot. Cl. xxiv. 169–175 (1897).

Rendle, A. B., *Notes on Trillium*, Journal of Botany, xxxix. 321–335 (1901).

Gleason, H. A., *The Pedunculate Species of Trillium*, Bull. Torr. Bot. Cl. xxxiii. 387–396 (1906).

Gates, R. R., *A Systematic Study of the North American Genus Trillium*, Ann. Missouri Bot. Gard. iv. 43–92 (1917).

[2] Peattie, Donald C., *Trillium in North and South Carolina*, Jour. Elish. Mitch. Soc. xlii. 193–206 (1927).

Friesner, Ray C., *The Genus Trillium in Indiana*, Butler Univ. Bot. Studies, Papers nos. 2 and 3 (1929).

[3] Goodspeed and Brandt, *Notes on the Californian Species of Trillium*, Univ. Calif. Pub. Bot. vol. vii, nos. 1–4 (1916–1917).